

1 1. Use of the promintron sequence of the *rolA* gene from *Agrobacterium rhizogenes* as
2 in SEQ ID NO. 1, or of DNA sequences comprising said promintron sequence, or of
3 functional homologous or portion thereof, to induce the expression of a DNA coding sequence,
4 in recombinant bacteria during exponential, post-exponential and stationary phase of growth,
5 and in bacteroids within root nodules, said coding DNA sequence being under the control of
6 said promintron sequence.

1 2. Use of the promintron sequence according to claim 1 wherein said recombinant
2 bacteria belong to either the *Enterobacteriaceae* or the *Rhizobiaceae* families.

1 3. Use of the promintron sequence according to claim 2 wherein said recombinant
2 bacteria belonging to either the *Enterbacteriaceae* or the *Rhizobiaceae* families are *E. coli*,
3 *Rhizobia* or *Agrobacteria*.

1 4. Use of the promintron sequence according to claim 3 wherein said recombinant
2 bacteria are of the *Rhizobia* genus, either within symbiotic root nodules or in a free living
3 status.

1 5. Use of the promintron sequence according to claim 4 wherein said recombinant
2 bacteria of the *Rhizobia* genus within symbiotic root nodule, are either bacteroids of stage I, II,
3 III, IV, V, or *Rhizobia* present in the apoplastic space, or *Rhizobia* present in the senescence
4 zone, or *Rhizobia* present in the nitrogen fixing zone, or *Rhizobia* present in the invasion zone.

1 6. A recombinant DNA molecule comprising the promintron sequence according to
2 claim 1, or functional homologous or portion thereof, and covalently linked to the 3' end of
3 said promintron sequence, a DNA coding sequence, said recombinant DNA molecule being
4 either harboured by prokaryotic episomal elements, or integrated in a bacterial genome.

1 7. The recombinant DNA molecule according to claim 6 wherein said DNA coding
2 sequence is either a monocistronic or a polycistronic transcriptional unit.

1 8. The recombinant DNA molecule according to claim 7 wherein said DNA coding
2 sequence encodes a protein involved in plant hormone auxin synthesis and/or metabolism.

1 9. The recombinant DNA molecule according to claim 8 wherein said DNA coding
2 sequence encodes a protein involved in the synthesis and/or metabolism of the auxin IAA or of
3 the auxin indolethanol.

1 10. The recombinant DNA molecule according to claim 8 wherein said DNA coding
2 sequence encodes the *iaaM* protein from *P. syringae* subsp. *savastanoi* or an homologous
3 thereof.

1 11. The recombinant DNA molecule according to claim 8 wherein said DNA coding
2 sequence encodes the *tms2* protein from *A. tumefaciens* or an homologous thereof.

1 12. (Amended) The recombinant DNA molecule according to claim 8 wherein said
2 DNA coding sequence encodes the *iaaM* protein from *P. syringae* subsp. *savastanoi* or an
3 homologous thereof and the *tms2* protein from *A. tumefaciens* or an homologous thereof
4 respectively.

1 13. The recombinant DNA molecule according to claim 8 wherein said DNA coding
2 sequence encodes the indolepyruvate decarboxylase from *Enterobacter cloacae* or an
3 homologous thereof.

1 14. (Amended) Genetically engineered bacteria comprising the recombinant DNA
2 molecule according to claim 6.

1 15. (Amended) Use of the recombinant DNA molecule according to claim 6 to
2 significantly increase the size of nodules of a plant.

1 16. Use of the recombinant DNA molecule according to claim 15 wherein said
2 statistically significant increase of the nodule size is of at least 20%.

1 ~~17. (Amended) Use of the recombinant DNA molecule according to claim 6 to~~
2 ~~significantly increase the capacity to fix nitrogen of a nodulated plant.~~

1 18. Use of the recombinant DNA molecule according to claim 17 wherein said
2 statistically significant increase of the capacity to fix nitrogen is of at least 20%.

1 19. (Amended) Use of the recombinant DNA molecule according to claim 6 to
2 significantly increase the plant biomass production.

1 20. Use of the recombinant DNA molecule according to claim 19 wherein said
2 statistically significant increase of the plant biomass production is of at least 10%.

1 21. (Amended) Legume plant infected by bacteria harboring the recombinant DNA
2 molecule according to claim 6 and having a significant increase of the size of nodules, and/or

3 of the nodule capacity to fix nitrogen, and/or of the plant biomass, and/or of the ability to fix
4 nitrogen.

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